

REMARKS/ARGUMENTS

All of the claims are rejected under 35 USC 102 or 103 as being unpatentable over Takei (USP 5,353,058), either by itself or in combination with one or more other references. All of the claims now require analyzing a luminance map of the digitally-acquired still image, including comparing the luminance map with patterns of luminance data that match face images; and based on the analyzing of the luminance map identifying one or more groups of pixels that correspond to a face within a foreground region of the original digitally-acquired still image which has a certain resolution, wherein the identifying comprises one or more of sub-sampling and weighted sampling of the resolution of the image, including reducing a resolution of at least one or more portions of the image on which computations are performed, and wherein the identifying further comprises detecting the face in real time or near real time. This feature is not taught nor suggested by Takei nor any of the other references being relied upon by the Examiner.

First, Takei does not describe identifying one or more groups of pixels that correspond to a face, based on analyzing a luminance map of the digitally-acquired still image. Takei only identifies flesh colors within digital images, and does not even determine whether any identified flesh color pixels correspond to faces.

Second, Takei does not detect faces in real-time or near real-time. As indicated above, Takei does not even detect faces. Moreover, the time- and resource-intensive processes described by Takei simply do not permit real-time nor near real-time performance.

In addition, none of the other relied upon reference discloses these features.

Takei describes methods for making pre-acquisition adjustments in acquisition conditions or parameters, specifically exposure (see col. 8, line 430-col. 9, line 5). Takei provides a correction signal which serves to adjust detector sensitivity in sub-regions that include flesh colors and where backlighting is determined to prevail. In contrast, Applicants' invention as set forth at amended claims 1-15, 22-33, 41-55, 63-73 and 81-112 involves post-acquisition image processing or adjustment or modification of values of pixels of an acquired image. For example, Applicants' provide methods based on calculations in view of comparing desired luminance with actual luminance of a detected face in an acquired image. Such post-acquisition image processing per Applicants' invention represents a different technological endeavor than making Takei's pre-acquisition adjustments to acquisition conditions or parameters, such as affecting exposure by adjusting detector sensitivity.

In addition, Applicants' invention as set forth at Applicants' amended claims 1-15, 22-33, 41-55, 63-73 and 81-112 requires reducing the resolution of at least one or more portions of the image on which computations are performed by one or more of sub-sampling and weighted sampling of the resolution of the image, thereby providing more efficient methods. The Examiner concedes that Takei does not describe this feature, but cites Cosatto et al. However, Cosatto et al. represents non-analogous prior art and cannot be combined with Takei to reject any of Applicants' claims. Cosatto et al. is in the field of image synthesis for animation. Cosatto et al. do not start with an image acquired with a digital image acquisition device including an lens and an image sensor. As such, Cosatto et al. do not handle real image data of images of faces captured with a digital image acquisition device. The fields of animation and digital image capture and processing are simply non-analogous, and the Examiner is respectfully

requested to withdraw this rejection, particularly since searching has not produced any sufficient reference in the relevant field of Applicants' invention.

For the reasons set forth above, it is submitted that the application is now in condition for allowance. The Examiner's reconsideration and further examination are respectfully requested.

The Examiner is respectfully invited to call the undersigned attorney at 408-218-3315 in case the event that the Examiner believes that there are any unresolved issues with this case.

Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-4399.

Respectfully submitted,

Dated: August 2, 2010

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